

What is Claimed is:

- 034207-2426360
1. A pressure support system comprising:
    - a housing;
    - a pressure generating system disposed within the housing for generating a flow of breathing gas;
    - a controller disposed within the housing in communication with the pressure generating system, wherein the controller controls the operation of the pressure generating system;
    - a slot defined in an exterior surface of the housing, wherein the slot is sized and configured for selectively receiving an information storage device; and
    - a terminal associated with the slot such that an information storage device communicates with the controller via the terminal responsive to the information storage device being disposed in the slot, wherein the controller is adapted to at least one of (1) read information from the information storage device and (2) write information to the information storage device via the terminal.
  2. The pressure support system of claim 1, further comprising at least one sensor adapted to measure a characteristic associated with one (1) a rate of the flow of breathing gas, (2) a pressure of the flow of breathing gas, and (3) a condition of a patient using the pressure support system, wherein an output of the sensor is provided to the controller.

3. The pressure support system of claim 1, wherein the pressure generating system includes:

a pressure generator; and

a pressure controller associated with pressure generator and operatively coupled to the controller for controlling 1) a pressure or 2) a rate of the flow of breathing gas delivered to the patient by the pressure generating system.

4. The pressure support system of claim 1, further comprising an input/output device operatively coupled to the controller.

5. The pressure support system of claim 1, further comprising a timing system operatively coupled to the controller for monitoring usage of the pressure support system.

Sub 6. An information storage device adapted for use with a medical device, the information storage device comprising:

an identification storage area adapted to contain at least one of (1) information describing the information storage device itself, (2) information identifying a user to which the information storage device is assigned, and (3) information identifying a medical device assigned for use with the information storage device; and

a first information storage area adapted to contain operating information for use in controlling an operation of such a medical device.

7. The information storage device of claim 6, wherein the identification storage area includes both 1) an information storage device identification area adapted to contain information describing the information storage device itself and 2) a user identification area adapted to contain information identifying a user to which the information storage device is assigned.

8. The information storage device of claim 7, wherein the identification area further includes a medical device identification area adapted to contain information uniquely identifying a medical device assigned for use with the information storage device.

9. The information storage device of claim 8, further comprising a data storage area adapted to store data written thereon by such a medical device.

10. The information storage device of claim 6, further comprising a data storage area adapted to store data written thereon by such a medical device.

11. The information storage device of claim 6, wherein the first information storage area includes:

a patient name area adapted to contain information regarding a name of a user to which the information storage device is assigned; and

a patient identification area adapted to contain at least one alphanumeric character identifying a user to which the information storage device is assigned.

12. The information storage device of claim 6, further comprising a first control data storage area adapted to contain information that controls whether the operating information can be read from the information storage device.

13. The information storage device of claim 6, further comprising a second control data storage area adapted to contain information that controls whether the operating information can be erased from the information storage device.

14. The information storage device of claim 6, further comprising a display data storage area adapted to contain information to be displayed on such a medical device.

15. The information storage device of claim 6, wherein the medical device is a pressure support device, and wherein the first information storage area includes a first area containing operating mode information designating an operating mode of the pressure support device and operating parameter information designating an operating parameter of the pressure support device.

16. An information storage device adapted for use with a medical device,  
the information storage device comprising:

an identification storage area adapted to contain at least one of (1) information describing the information storage device itself, (2) information identifying a user to which the information storage device is assigned, and (3) information identifying a medical system assigned for use with the information storage device; and

a data storage area adapted to store data written thereon by such a medical device.

17. The information storage device of claim 16, wherein the identification storage area includes both a storage device identification area adapted to contain information describing the information storage device itself and a user identification area adapted to contain information identifying a user to which the information storage device is assigned.

18. The information storage device of claim 17, wherein the identification area further includes a medical device identification area adapted to contain information uniquely identifying a medical device assigned for use with the information storage device.



wherein the controller communicates with the information storage device via the terminal responsive to the information storage device being disposed in the slot, and wherein the controller is adapted to at least one of (1) read information from the information storage device and (2) write information to the information storage device via the terminal.

20. The pressure support system of claim 19, further comprising an adapter adapted to be selectively disposed in the slot, wherein the adapter provides communication access between the controller and an external device responsive to being inserted into the slot.

21. The pressure support system of claim 19, wherein the pressure support device further comprises a timing system operatively coupled to the controller for monitoring usage of the pressure support device.

22. The pressure support system of claim 19, wherein the first information storage area includes a first area containing operating mode information designating an operating mode of the pressure support device and operating parameter information designating an operating parameter of the pressure support device.

23. A method of communicating with a medical device, comprising:  
providing a medical device having a slot defined in an exterior surface thereof;

providing an information storage device sized and configured to be selectively disposed in the slot;

inserting the information storage device into the slot; and

communicating information from the information storage device to the medical device responsive to the information storage device being disposed in the slot.

24. The method of claim 23, further comprising causing the medical device to operate in a predetermined manner based on information read from the information storage device responsive to the information storage device being inserted into the slot.

25. The method of claim 24, further comprising preventing such a medical device from receiving the information from the information storage device after the information has been initially provided to such a medical device.

26. The method of claim 23, further comprising:  
monitoring usage of the medical device; and  
writing information regarding usage of the medical device onto the information storage device.



27. The method of claim 23, further comprising prompting a user to remove the information storage device responsive to an occurrence of a predetermined condition.

28. The method of claim 27, wherein the predetermined condition includes:

a failure of the medical device to communicate with the information storage device,

an elapse of a predetermined amount of time since the information storage device was disposed in the slot in the pressure support device, and

an accumulation of data in the information storage device exceeding a predetermined threshold.

29. The method of claim 23, further comprising writing information from the pressure support device to the information storage device.

30. The method of claim 29, further comprising:  
removing the information storage device from the slot in medical device;  
transporting the information storage device to a remote location; and  
downloading information concerning the pressure support device from the information storage device at the remote location.

31. A method of reporting information from a medical device to a monitoring center:

providing a pressure support device having a slot defined in an exterior surface thereof;

providing an information storage device sized and configured to be selectively disposed into the slot;

inserting the information storage device into the slot; and

communicating information to the information storage device from the medical device responsive to the information storage device being disposed in the slot.

32. The method of claim 31, further comprising:

removing the information storage device from the slot in medical device;

transporting the information storage device to a monitoring center; and

downloading information concerning the pressure support device from the information storage device at the monitoring center.

33. The method of claim 31, further comprising:

monitoring usage of the medical device; and

writing information regarding usage of the medical device onto the information storage device.

34. The method of claim 31, further comprising prompting a user to remove the information storage device responsive to an occurrence of a predetermined condition.

35. The method of claim 34, wherein the predetermined condition includes:

a failure of the medical device to communicate with the information storage device,

an elapse of a predetermined amount of time since the information storage device was disposed in the slot in the medical device, and

an accumulation of data in the information storage device exceeding a predetermined threshold.

36. A pressure support system comprising:

pressure generating means for generating a flow of breathing gas;

controlling means for controlling the operation of the pressure generating means;

housing means for housing the pressure generating means and the controlling means;

receiving means associated with the housing means for receiving an information storing means;

information storing means for storing information adapted to be disposed in the receiving means; and

B1 communicating means for communicating information in at least one of (1) a first direction from the information storing means to the controlling means and (a) second direction from the controlling means to the information storing means responsive to the information storing means being disposed in the receiving means.

37. The pressure support system of claim 36, further comprising prompting means for prompting a user to remove the information storing means from the receiving means responsive to an occurrence of a predetermined condition.

38. The pressure support system of claim 37, wherein the predetermined condition includes:

a failure of the pressure support device to communicate with the information storage device,

an elapse of a predetermined amount of time since the information storage device was disposed in the slot in the pressure support device, and

an accumulation of data in the information storage device exceeding a predetermined threshold.

39. The pressure support system of claim 36, further comprising monitoring means for monitoring usage of the pressure generating means, wherein the

communicating means writes information regarding usage of the pressure generating means onto the information storing means.

40. The pressure support system of claim 36, wherein the controlling means controls the operation of the pressure generating means based on information contained in the information storing means.

41. The pressure support system of claim 36, further comprising means for preventing the controlling means from receiving operating information from the information storage device after such operating information has been initially provided to the pressure support device.

42. The pressure support system of claim 36, further comprising adapter means, sized and configured to be received, at least partially, within the receiving means, for providing a communication link between the controlling means and an external device responsive to being disposed on the receiving means.

43. A pressure support system comprising:  
a housing;  
a pressure generating system disposed within the housing for generating a flow of breathing gas;

a controller disposed within the housing in communication with the pressure generating system that controls the operation of the pressure generating system;

a transceiver operatively coupled to the controller such that an information storage device communicates with the controller via the transceiver responsive to the information storage device being disposed proximate to the transceiver, wherein the controller is adapted to at least one of (1) read information from the information storage device and (2) write information to the information storage device via the transceiver.

44. A method of configuring and pressure support system, comprising:  
providing a pressure support system having a slot defined in an exterior surface thereof;  
providing an information storage device sized and configured to be selectively disposed in the slot;  
inserting the information storage device into the slot;  
communicating first information from the information storage device to the medical device responsive to the information storage device being disposed in the slot; and  
configuring the pressure support system based on the first information.

45. The method of claim 44, wherein the first information includes operating mode information designating an operating mode of the pressure support device and operating parameter information designating an operating parameter of the pressure

